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Relative ecological and biological indicator values of plum and prune cultivars

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Summary: The study was conducted to compare historical plums, gene collections, and is currently cultivated and recent perspective varieties from the author. The object of the study was the relative ecological Borhidi's figures and classification of varieties under the new definition, as the relative biological values. There were 11 figures no one in particular affect the data of the plums grown in importance as TB, WB, RB, LB, and the values are relative biological value (OP, FR, SS, and DR). The specificity of each indicator was different, but in general the importance and specific breeds was associated with. The SB (salt figures) is not proved informative, partly because small data in the literature, on the other hand, had little to their own observations as well. The gene bank of Cegléd is now third-generation (1951–1972, 1973–1991, since 1992) kind of collection, during which many aspects have changed climatic conditions: cold winter eased the strictness, but has increased the threat of spring frost advection. The relative biological scores markedly influenced around flowering extreme weather (dry, windy weather and so flowering in within 2-3 days), optimal conditions of the plum pox virus vectors and of course the presence of fruit and foliage harmful fungi. It see to be, in the case of semi-wild and wild fruit species – are possible with similar comparative analyzes, and hopefully will in feral forms, culture – as we have seen previously (Surányi 2000 and 2006). In the continuation analysis of the natural vegetation and cultural context of the complex multifactorial factors will be carried out more easily, according to the relative value figures, as well as rootstock effects and plantation's habitat studies, and even the most phytotechnical evaluation of interventions.

Keywords: plums, relative ecological and biological figures, comparative studies of cultivars

Introduction

The plum is one of the oldest domesticated fruit species, yet relatively little-known archaeological site, although the evidence is, however, rich archeobotany. The Carpathian Basin is a different situation because the local outcrops of rescue excavations archeobotanical always received great emphasis. These data carry cultural evolution introduced historical information is, of course, the archaeological ages; ethnic groups often exchanger activity was also documented (Gyulai 2001). The natural conditions of the natural environment taking into account the conversion of a long process result (Surányi 1985, Roach in 1985, Visy 2003).

The plum and geographic large regions importance of really raises the *Prunus domestica* (reciprocal) parental partners in the Carpathian Basin resident, that is, blackthorn and cherry plum area meets reach the Caucasus region of (Rybin 1935, 1936 and 1962), Central Europe and Balkan (Schwanitz 1973, Terpó 1974, Larcher 1980, Faust – Surányi 1997).

The origin of species, their genetic and biological properties of the characters assume the specific ecological needs (Faust et al. 2011). In a number of branches of botany ecological evaluation is not new, examples of which can be found in the literature on Hungarian language (Soó 1964–1985, Zólyomi 1964, Précsényi 1986, Simon 1988 and Borhidi 1993).

Over the last decade, based mainly on works of Simon (1988, 1991) and Borhidi (1993, 1995), individual ecological indicator values have been established (Surányi 2000), and applied for the varieties prepared in the national cultivar catalogue (Pernesz 2013), pomological handbooks (Soltész 1998) and former pomological works (cf. Surányi 2002). This study presents an expanded and updated version of that one published in Kanitzia (Surányi 2006), and a summary of Hungarian fruit cultivars in Acta Bot. Hung. (Surányi 2014).

The expression of the ecological experience in form of relative indicator values is not a new classification experiment to compare the ecological species. In this paper we consistently use Borhidi's (1993, 1995) fundamental work on the ecological values of the indigenous flora. At first, Iversen (1936) applied relative indicator values for characterising salt-resistance of coastal plants, suggesting a three-grade scale. Ellenberg (1950, 1952) worked out the ecological indicator values of a larger number of meadow plants and different weeds for several ecological factors and the first experiment for applying these indicator values in classifying plant communities. Ellenberg (1963) applied 5-grade scales and the moisture scale was amplified later to a 10-grade scale.

The development of the indicator values, an important contribution was made by Zólyomi's TWR-system (1964) and that improved their staff (Zólyomi et al. 1967).

The TWR-system consisted of a 10-grade temperature scale (T), an 11-grade water content or soil moisture scale (W) and a 5-grade soil reaction scale (R), which was worked out for 1.400 native species of the Hungarian flora and weeds

(Kárpáti 1978) and with some critical taxonomic groups (Borhidi 1969). The TWR formed an ecological reference system for plant communities and to place a multidimensional ecological space (cf. Précsényi, in Zólyomi 1964, Zólyomi and Précsényi 1979, cit. Borhidi 1993, Zólyomi 1987).

Ellenberg (1974) elaborated ecological behaviour indicator values with regard to the seven main environmental factors; three of them are climatic ones: temperature (T), light (L), and continentality (C), further three indicators related to soil factors, i.e. moisture or water supply (F), acidity or Soil reaction (R) and nitrogen supply (N), the salinity has been recently actualised (Ellenberg et al. 1991). Although the indicator values of Ellenberg were not used by the Hungarian botanists, it had been included into the Synopsis of Soó (1964–1985): the TFRN-values of Soó can be obtained by dividing Ellenberg's figures. Kovács (1979) elaborated Ellenberg's indicator values of 1.300 plant species of Romania and a register of other biological characteristics, too. Borhidi (1993, 1995) found the ecological indicator values of the Hungarian flora in the following order, which we applied in a recent study of pomological species. In the following, we take the figures as defined in Borhidi's (1993, 1995) study, as well as to extend the cultivated fruit varieties in the Hungarian cultural flora.

This study of the species plum (*Prunus insititia*, *P. cerasifera*, *P. domestica*, *P*. x *italica* convar. *pomariarum*, *P*. x *italica* convar. *ovoidea*, *P*. x *italica* convar. *mamillaris*, P. x *italica* convar. *claudiana*, *P* . *syriaca* and *P*. *salicina*) collected (genebank) of old and recent (wild) include an analysis cultivars, complete with Ellenberg-Borhidi system relative measurement of four biological tool (open pollination, frost resistance, disease resistance and sensitivity sharka virus) (cf. Gyúró 1974 and Soltész 1998).

The relative ecological and biological values are based on a large number of ecological sources and own data. The figures came from Ellenberg - Borhidi (485 varieties are not individually labeled with the relevant data) from the following sources: Faust (1989), Kozma et al. (2003), Mándy (1963), Gardner – Bradford – Hooker (1952), G. Tóth (1997), Jávorka – Soó (1951), Kárpáti – Terpó (1971), Kobel (1954), Kozma et al. (2003), Mándy (1963), Larcher (1980), Papp (2003 and 2004), Papp – Tamási (1979), Porpáczy (1964), Ramming – Cociu (1991), Raunkiaer (1905), Soltész (1998 and 2014), Surányi (1985, 1986, 2000, 2006, 2011, 2013 and 2014), Tomcsányi (1979), Vondraček (1975) and V. Németh (1986).

The new, additional, so-called relative biological indicators in determining the source of these included: Bellini et al. (1982), Bereczki (1877-1887), Bordeianu et al. (1965 and 1969), Brózik (1960), Brózik – Nyéki (1975), Crane – Lawrence (1956), Csöbönyei (1957-1970), Dahl (1935), Dermine – Liard (1957 and 1978), Faust – Surányi (1997), G. Tóth (1997), Gyuró (1974 and 1990), Hedrick et al. (1911), Jávorka – Soó (1951), Knight (1969), Kobel (1954), Kozma et al. (2003), Mándy (1963), McGregor (1976), Nicotra et al. (1983), Nyéki (1980), Nyéki – Soltész (1996), Holb et al., (2007), Nyéki – Soltész – Szabó (2012), Papp (2003 and 2004), Pernesz (2013), Porpáczy (1964), Ramming – Cociu (1991), Röder (1940), Soltész (1998 and 2014), Surányi (1985, 1986, 1990a and 1990b, 1991, 1991-2015, 2002, 2005, 2006, 2009, 2013 and 2014), Surányi – Erdős (2004), Szabó (1989), Taylor (1949), Tomcsányi (1960 and 1979), Tóth (1957, 1967, 1968), Tóth – Erdős – Surányi (1971-1990), Tóth – Surányi (1980) and Vondraček (1975).

Materials and methods

There are 485 different plum cultivars which have different taxonomic character in Material and Methods. These relative values determined on the basis of the ecological information of plums for references to literary sources… The definition of Borhidi's ecological figures is following (1993 and 1995).

TB: The relative *temperature figures* reflecting the heat supply of the habitats where the species occur (mainly based on the distribution according to the latitudinal vegetation zones and altitudinal belts). The temperature figures of Ellenberg's (1974) 9-grade scale (T) applied by Borhidi (B) (1995) to the Hungarian flora and by Surányi (2014) to the Hungarian culture's flora. The relative figures indicate the following heat-climate belts or the corresponding microclimate conditions:

5. Montane mesophilous broad-leaved forest belt
6. Submontane broad leaved forest belt
7. Thermophilous forest or woodland belt.

WB: The relative *moisture figures* (occurrence in relation to soil moisture or water table) according to the 12-grade F-scale of Ellenberg (1963). The scale is very similar to the W-scale of Zólyomi (1964), but the water plants have a more detailed categorization, as follows:

4. Plants of semidry habitats
5. Plants of semi humid habitats, under intermediate conditions
6. Plants of fresh soils
7. Plants of moist soils not drying out and well aerated.

RB: *Reaction figures*, according to the nine-grade Ellenberg's scale (1952), reflect to the occurrence of the plants in relation of the soil reaction of the habitats (Tüxen – Ellenberg 1937). In the 5-grade Zólyomi's (1987) scale calciphilous and salt tolerant or even halophilous plants are equally treated as basiphilous plants. Here the two groups are differentiated by their positive or negative *salt figure* category. A comparison of the reaction value scales according to Ellenberg's (1952) versus Zólyomi's classification (1987) was carried out by Pichler – Karrer (1991). The correspondent degrees are:

4. Plants of moderately acidic soils
5. Plants of slightly acid soils
6. Mostly on neutral soils but also in acid and basic ones, generally widely tolerant, more or less indifferent plants
7. Basifrequent plants, mostly on basic soils.

NB: *Nitrogen figures* according to Ellenberg's 9-grade scale (1974), based on the occurrence in relation to the ammonia and nitrate supply of the habitats, which received

Borhidi (1995) then Surányi (2014) too. These are degrees:

4. Plants of submesotrophic habitats
5. Plants of mesotrophic habitats
6. Plant of moderately nutrient rich habitats.

LB: *Light figures* according to Ellenberg's 9-grade scale (1974), based on the occurrence of plants in relation to relative light intensity during summer time. Degrees are follows:

4. Shadow-half shadow plants; photosynthetic minimum between 5 and 10% relative light intensity
5. Half shadow plants receiving more than 10% but less than 100% relative light intensity
6. Half shadow-half light plants; photosynthetic minimum between 10 and 40% relative light intensity
7. Half light plants, mostly living in full light but also shadow tolerant.

KB: *Continentality values* according to Ellenberg's nine-grade scale (1952) based on the main distribution of plants according to degree of continentality of the general climate (see Meusel – Schubert 1972) with emphasis on maximum and minimum temperature. Degrees following:

4. Suboceanic species, mainly in Central Europe but reaching to East
5. Intermediate type with slight suboceanic-subcontinental character
6. Subcontinental, main area in eastern Central Europe
7. Continental-subcontinental species main area in East-Europe.

SB: *Salt figures* for indicating plant occurrence in relation to the salt concentration of the soils in a 9-grade scale, according to Scherfose (1990). Literary sources of ecological indicators are included in the Introduction, because breakdown by type of detail is not possible. The salt figures at least, developed to the SB. The toxic salt content is generally perceived afterwards, when the trees have been damaged:

0. Halophob species not occurring in salty or alkalic soils
1. Salt tolerant plants but living mainly on non-saline soils.

It was developing new added relative value numbers that have been introduced in the fruit-bearing species. We first presented in open pollination, the flower buds and bark frost sensitivity and significance for plums and prunes main concern viruses Sharka sensitivity and susceptibility to disease pathology (monilia, polystigma, clasterosporium, taphrina) characterization among the plum cultivars.

OP=Measuring of *open pollination*

1. over 35% of open pollination
2. 20-35% of open pollination
3. 2-20% of open pollination
4. below 2% of open pollination.

FR=Degree of *frost resistance*

1. frost tolerant (over 5% of flower bud and bark damage)
2. moderately frost sensitive (15-40% of damages)
3. frost sensitive (about 50% of frost damages).

SS=Relative value of *Sharka virus sensitivity*

1. resistant to Sharka (0=no symptoms and presence)
2. tolerant to Sharka (no symptoms, or only in the leaves)
3. susceptible (largely symptomatic leaves and fruits)
4. very sensitive (symptomatic of the whole tree).

DR=Measuring of *disease resistance*

1. resistant to disease (0= no symptoms on the trees)
2. moderately sensitive (cc. 30% of leaves or fruit symptoms)
3. sensitive (over 50% of leaf symptoms and fruit falling).

In this study we wanted to choose, whether it is possible in an economic species, though several taxa botanical species and under species the representatives of the ecological and biological differences between cultivars characterization according to Ellenberg – Borhidi – Surányi's modified based on the relative figures. The results are shown in summing table; we assume that the cultivars will be easier of origin and economic-botanical view can be evaluated, increasing the effectiveness of plum cultivation.

Results and discussion

There were suitable for comparing the plum varieties based on 485 relative ecological figures of plums (Borhidi 1995), towards also a large number of data and its own observations, the relative biological indices. Since the beginning of studies, in particular, increased numbers can be expressed in value relative information (as ecological figures) of importance: due to climate change because of the extreme weather, the lack of rainfall actual vegetation – growing without irrigation, drought-tolerant cultivars of plums and role increase. Climate change impacts not only effects because of new pathogens, pests and dangers roof role in the change (increase can be observed more) plum cultivation – a series of new problems brought to light.

Although it is very difficult to prove the following relevantly, but experience shows that the largest number of varieties can change your reaction on the environment. So that no less – and therefore for this reason – the physiognomic character of plums too. Increasingly drier due to weather due to the increasing weight vector (aphids) organisms cause problems of the viral disease, or wet vegetation and fungal diseases and plum fruits mechanical damage (cracking). In 2014 it was almost impossible to defend in times of torrential rains and the thin-skinned and high sugar content varieties.

Since it was not possible types of representative taxa (*P. cerasifera*, *P. insititia*, *P. domestica*, four convarietas of *P. italica*, *P. syriaca*, *P. salicina*, as well as some American and other hybrid species, etc.) are statistically correct way compare (sort of like varieties and the order of repetition), so some varieties listed in Table 1 were carried out only to measures of individual comparisons. Earlier studies have been faced with these difficulties (Surányi 2000, 2006 and 2014). Still, there are several ways we tried to evaluate the fruit species, that is not only used in Ellenberg and Borhidi's figures, but Soó (1964-1985), Zólyomi et al. (1967), Simon

(1988 and 1991) and Kovács (1979) also tried to evaluate the concept of fruit growing (that is in our fruit flora) cultivars. Although the literature cited authors examined all the natural species, varieties produced also tried to extend it. Finally, the Borhidi's relative ecological indicators found to be satisfactory analysis of the varieties (Surányi 2006 and 2014) *(Table 1 and 2),* which extended its biological figures.

The main conclusions were as follows:

1. The characterization of the plum cultivars are suitable values: *relative temperature figures* (TB), *relative moisture figures* (WB) and *light figures* (LB).

But that does not mean the second *nitrogen figures* (NB), *soil reaction figures* (RB) and *continentality values* (KB) are insignificance.

3. The *salt figures* (SB) – in Ellenberg-Borhidi's system – according to the species natural to use, but varieties in *Prunus* the new and further analyzes are required. SB values are not sensitive enough.

4. The figures relate to the value of open pollination of cultivars (OP), degree of frost resistance (FR), – sharka virus sensitivity (SS) and the grade of disease resistance (DR) was evaluated and sensitivity of a quick overview.

5. As continuation of this work is mainly apricot, apple, pear and peach cultivars usable seen their economic-botanical evaluating, with all the comments, cabbage, which is valid for the plum varieties as well.

6. Apparently, among the cultivated strawberry cultivars (cf. Surányi 2005 and 2014), this form of the 11 least-used figure of the salt figures (SB) from the fruit species for each species at the level of the same can be said (Surányi 2014).

7. In the case of semi-wild and wild fruit species – are possible with similar comparative analyzes, and hopefully will in feral forms, culture – as we have seen previously (Surányi 2000 and 2006).

8. In the continuation analysis of the natural vegetation and cultural context of the complex multifactorial factors will be carried out more easily, according to the relative value figures, as well as rootstock effects and plantation's habitat studies, and even the most phytotechnical evaluation of interventions.

Table 1. Relative ecological indicator values of plum cultivars

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Abundance	6-7	5	5-6	5	6	5	0	3	3	2-3	3
Ageni	6	5	5	5	6	5	0	3	1-2	2	2
Ageni 698	6	5-6	5	4-5	6	5	0	3	1-2	2	2
Ageni 707	6	5-6	5	4-5	6	5	0	3	1-2	2	2
Alanvay korai	5-6	5	5	5	5-6	5-6	0	3	2-3	2	3
Albatros	5-6	5-6	5	5	6	5-6	0	2-3	1	2	2
Albion	5-6	6	5	5	5	5-6	0	4	2	2	1
Althann ringló	5-6	6-7	4-5	5	5-6	5-6	0	3	1-2	3	2
Althann ringló Bb. 94	5-6	6-7	4-5	5	5-6	6	0	3	1-2	2-3	2
Altländischer Saure Zwetsche	5-6	6	5	5	5-6	6	0	4	2-3	2	3
Altländischer Späte Zwetsche	5-6	6	5	5	5-6	6	0	4	2-3	2	3
Alutscha	6-7	6	5-6	5-6	5	6	0-1	4	1	1-2	1-2
Angoulême-i ringló	6	5-7	5	5	6	6	0	3	2	2	2
Asatan	5-6	6	5-6	6	5-6	6	0-1	2-3	2	1-2	1-2
Áttetsző ringló	5-6	5	5	4-5	6	5-6	0	3	2	2	2-3
Auerbacher	6	6	6	5-6	6	5-6	0	2	2	3	2
Augusztinka	6-7	6	6	6	6	5-6	0	3	2	2	1
Avalon	5-6	6-7	5	5	5-6	6	0	3	2-3	2	2
Barackszilva	6	5-6	5	5	5-6	6	0	4	3	2-3	2-3
Barna Lujza	6	6	5-6	5-6	5	6	0	2-3	2	1-2	3
Bassett	5	5	5	5-6	5-6	5-6	0	4	3	3	3
Bazalicza szilvája	5	5-6	5	5	6	6	0	4	1-2	1-2	1-2
Bärtschis Frühzwetsche	5-6	5-6	5-6	5	5-6	6	0	3	1-2	1-2	2
Behren's királyszilva	5	5	5	5-6	5-6	5	0	2	2	2-3	2-3
Béjonnières-i szilva	6-7	6	5	5	6	5	0	3	2-3	2-3	2-3
Belga kék	5-6	5	5-6	5	5-6	5	0	1	1-2	1	1-2
Bellamira	6	5-6	5-6	4-5	5	5	0	3	2	2	2
Beni-detto	5-6	5-6	6	5	5	5	0	3	2	1-2	2

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Berbencei szilva	5	5	6	5	5	5-6	0	2	1	2	1-2
Beregi datolya	5-6	5-6	5-6	4	5	6	0	3	2	2	2
Bergthold korai mirabella	5-6	5-6	5	5	5	5-6	0	3	1-2	1-2	1
Bernardina	6	5	5	5	5	5-6	0	2	2	2	1
Besztercei Bb 398	5-6	6	5-6	5	5	6	0	2	1	2	1-2
Besztercei Bb. 416	5-6	6	6	6	5	5-6	0	2	1	2	1
Besztercei Bt. 2	6	5-6	5-6	4-5	5	6	0	2	1	1-2	1
Besztercei C. 93	7	6	6	5	4-5	6	0	3	1-2	3	1
Besztercei Elvira 18	6	5-6	5	5	5	5-6	0-1	2	1	2	1
Besztercei Kruft	6-7	6	5-6	5	5	6	0	3	1	1-2	1
Besztercei muskotály	5-6	5	5	4-5	5	5-6	0	1	1	2-3	1-2
Besztercei Nm. 116	6	5-6	5	5	4-5	5-6	0	2	1	2	1
Besztercei Nm. 122	5-6	5-6	5-6	4-5	5	6	0	2	1	2	1
Besztercei Nm. 150	5-6	5-6	5-6	4-5	5	6	0	2	1	1-2	1
Biodeck korai	6	6	6	5	5	6	0	3	2	2	2-3
Bistricka	6	6	5-6	5-5	5	5-6	0	2	1	2	1
Black Amber	7	6	5	4-5	6	6	0	3	3	1-2	2
Black Beaut	6-7	6	6	5	6	6-7	0	3	2-3	2	2
Black Damas	5	5	6	5	6	6	0	1-2	1-2	2	2
Black Diamond	6-7	6	6	4-5	6	6-7	0	2-3	2	1-2	2-3
Black King	6-7	5	5-6	5	7	6-7	0	3-4	3	2	2
Blaue Berliner Aprikosenpflaume	6	6	6	5-6	6	6	0	4	2-3	1-2	2
Bluefre	6	5	5	5	6	6	0	2-3	2	2	2
Bódi szilva	5-6	5-6	5-6	5	6	5-6	0-1	1-2	1	1-2	1-2
Bohn mirabella	5-6	5	5	5	6	5-6	0	2	2	2	1
Bon-bon	5-6	5	5-6	5	5-6	6	0	3	2	1-2	2
Bonne de Bry	6	5	5	5	6	5-6	0	3	2	2	2
Bonnie 221	6-7	6	6	5	6	7	0	3	2	2	3
Boranka	5-6	5	5-6	5	5-6	5-6	0	2	1-2	2	2
Bose piros szilva	6-7	6	5	5	6	6	0	3	2	2-3	2-3
Borsumi	6-7	5	5-6	5-6	6	5-6	0	1	2	2	2-3
Boszniai kék	5-6	5	5-6	5	5	5-6	0	2	1	3	1
Bosznia királynője	5-6	5	5	5-6	5	5	0	3	1	2	2
Boszniai nagyherceg	5-6	5-6	5	5	5	5-6	0	2	1-2	3	1
Bourdett Angelina	5	4-5	5-6	5	5-6	5	0	3	1-2	1-2	2
Brahy ringló	6	5-6	5	4-5	6	5	0	3	2	2	3
Brassai	5-6	5-5	5	5	5-6	5	0	3	2	1	1-2
Braunaui kajszinszilva	6	5	6	5	5-6	6	0	3	2	1-2	2
Brianston ringló	6-7	5-6	5	5	6	5	0	4	2	1	3
Brompton	6	4-5	6	4	6	6-7	0	2	1	1-2	1-2
Brookred	5-6	5	6	5	6	6	0	2-3	2	1-2	2-3
Brvamovska	6	5-6	6	5	6	5-6	0	2-3	1-2	2	1
Buchner királyszilva	5-6	5-6	5	5	5-6	5	0	3	2-3	2-3	2-3
Bucurie de Bucuresti	6	6	5-6	5	6	4-6	0	2-3	1-2	2	2
Burbank	6-7	5	5-6	5	5-6	5	0-1	3-4	2	2	3
Burmosa	6-7	6	5-6	5	5-6	5-6	0	2-3	2	2	3

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Burton	6	5-6	5-6	5	5	5-6	0	3	1-2	1-2	1
Busuioace de Gheurghiu	6	5	6	5	5	6	0	2-3	1-2	2	1-2
Bühle Verbote	5-6	5-6	5-6	5	5	5	0	2	1	2	2
Bühler Frühzwetsche	5-6	5	5	4-5	6	5-6	0	1-2	1	1-2	1-2
Čačanska lepotica	6	5-6	5-6	5	5-6	5	0	1	2	1-2	2
Čačanska najbolja	6	5-6	5-6	5	5	5	0	1-2	1-2	1-2	1-2
Čačanska rana	6	5-6	5-6	5	5-6	5	0	2-3	2	2	1-2
Čačanska rodna	6	5-6	5-6	5	5-6	5	0	1-2	1-2	2	1-2
Čačanska šečer	6	5	5-6	5	5	5	0	3	1-2	2	2
California Blue	5-6	5-6	5	4	5	5-6	0	3	1-2	1-2	2
Cambridge Gage	6	6	6	5	5	5	0	2	2	2	2
Casalinga	5-6	5	5-6	4-5	5	6	0	2-3	1	2-3	1
Centenar	5-6	6	6	5	5	5	0	3	2	1-2	2
Chalonsi kései	5-6	5-6	5-6	4-5	5	5	0	3	2	2-3	2-3
Charcuty	6-7	6	6	5	5	5-6	0-1	4	3	3	3
Chrudimer	5-6	5-6	5-6	5	5-6	5	0	2	1-2	1-2	1-2
Cieza No. 1	5	5	5	5	5	5-6	0	2	1-2	2	1
Coates	6	5-6	5	5	5-6	6	0	2-3	2	2	2
Cochet	6-7	6	6	5	5-6	5-6	0	2-3	2-3	2	2-3
Coë's Golden Drop	5-6	5	4-5	5	5	5	0	2	1-2	1	1-2
Columbia	6	5-6	5	5	5-6	5-6	0	3	2-3	3	1
Compass	5	5	6	4-5	6	7	0	1-2	2	2	3
Cooper nagy szilvája	6	6	6	5	6	5-6	0	2	2	2	3
Crimson Drop	6	5	5	5	5-6	6	0	2-3	2	2-3	2
Czar	5-6	5-6	5-6	6	5	6	0	1	1-2	2	2
Czernowitzer	5-6	5-6	5	5	5-6	5-6	0	2-3	2	1	2
Csahticska	6	6	6	5	5-6	6	0	3	1-2	2	2
Cservena Afazka	6-7	6	6	6	5-6	6	0	1-2	1-2	1	1-2
Csúcsos szilva	5-6	5	5-6	5-6	5	6	0	4	2	2	2
D'Alsace	6	5-6	5	5	5	5-6	0	2	1-2	2-3	1
Dames de Tours	5-6	5-6	5-6	6	5-6	6	0	3	2	2	2
De Maris	6	6	6	5-6	5-6	6	0	3-4	3	2	2-3
De Soto	6	5	5-6	4	6-7	7	0	3-4	3	1	1-2
Debreceni muskotály	6	6	5-6	5-6	5	6	0	2-3	1-2	1-2	2
Decaisne szilva	6	5-6	6	6	5-6	6	0	2	2-3	2	2
Déli Vengerka	6	6	5-6	5	6	6	0	2-3	1	2	1
Denniston piros szilva	5-6	5-6	6	5-6	6	6	0	1	2	1-2	2-3
Denniston's Superb	6	6	5	5-6	5-6	6	0	1	2	2	3
Dewett	5-6	5-6	5-6	5-6	5	5-6	0	3	2-3	2	2
Diamond	6-7	6	6	5	6-7	6	0	3	2-3	2	2
Dombroviţa	5-6	6	6	5-6	5-6	6	0	3	2	2	2
Dörell nagy szilva	6	6	5-6	5	5-6	6	0	3	1-2	2	2
Drjanovoi	5-6	5-6	6-7	5-6	5-6	6	0	2	1-2	2-3	1
Duke Edinbough	5-6	5-6	6-6	5	5-6	6	0	3	2-3	2	2
Duarte	6-7	5-6	6	4-5	6-7	6-7	0	3	2	2	2
Duránci szilva	6	6-7	5-6	5	5-6	5-6	0	2	1-2	1	1

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Duránci szilva C. 1512	6	6	5	5	5	6	0-1	2	1-2	1	1
Dzsanka 1	6-7	4-5	5-6	4	6	7	0	1	1-2	1-2	1
Dzsanka 1/4	6-7	5	5-6	4-5	5-6	6-7	0-1	1	1	1-2	1
Dzsanka 3	6-7	5	5-6	4-5	5-6	6-7	0-1	1	1-2	2	1
Early Favorite	6	6	5-6	5-6	6	6	0	3-4	2	2	1-2
Early Laxtons	5-6	5-6	5-6	6	5-6	6	0	3-4	2	2	2
Early Mirabelle	5-6	5-6	6	5	5-6	6	0	2	2	1	2
Early Rivers	6	6	5-6	5-6	6	6	0	4	1-2	2	1-2
Ebersweier Frühzwetsche	5	5-6	6	5-6	6	5-6	0	4	1-2	2	1-2
Egger Gusztáv	6	6	6	5-6	5-6	6	0	2	2	2	1-2
Eldorado	7	6	6	5	6-7	7	0	3	2-3	2-3	2
Elena	5-6	5	5	5-6	5-6	5-6	0	2	2	2	2
Elephant Heart	7	5-6	5	4-5	5	6	0	2-3	2-3	2	1-2
Ember	5-6	6	5-6	5	6	6	0	3	2	2	1
Empress	6	6	5	5	6	6	0	3	1-2	1-2	2
Englebert herceg	5-6	5-6	5-6	5	5-6	5-6	0	2-3	1-2	2	1-2
Ersinger Frühzwetsche	5-6	5	5-6	5-6	5	6	0	2-3	1-2	2	1-2
Erdei nyakas	5-6	5-6	5-6	5	6	6	0	3	2	1-2	2
Esperen aranyszilvája	6	6	6	5-6	5-6	5-6	0	3	2-3	2	1-2
Esslinger Frühzwetsche	5-6	5-6	5-6	5-5	5	5-6	0	2	2	2	2
Fazekas duránci	6	6	5-6	5	5-6	6	0	2-3	1-2	1	1-2
Fehér császárnő	5-6	5-6	6	6	5-6	6	0	3	2	2	2
Fehér diapré	6	6	5-6	6	6	5-6	0	3	1-2	2	2
Fehér királynő	6	5-6	6	5-6	5-6	6	0	3	2	2-3	2
Fehér szilva	5	5	5-6	5-6	5-6	6	0-1	1-2	1-2	2	1-2
Fellenberg	5	6	6	5	6	5-6	0	3	1-2	3	2
Firbas királyszilva	6	6	6	5-6	5-6	5-6	0	2-3	2	2	2
Flotow mirabella	5-6	5	5	5	5-6	6	0	1	1	1-2	3
Formosa	6-7	6	6	6	6-7	6	0	3	3	2	2
Francia narancs szilva	6	6	6	5-6	6	6	0	3	3	3	2
Frankfurti kék	5-6	5-6	5-6	5-6	6	5-6	0	2-3	1-2	2-3	3
Freudenbergi korai	6	5-6	5	5	6	5-6	0	2-3	2	2	2
Friar	7	5	5	5	5-6	5-6	0	3	2-3	2	1-2
Frontier	7	5	5	5	5-6	6	0	2-3	2-3	2	2
Fultoni sárga	5	5	5	5	5-6	6	0	4	2-3	3	2
Gabrovszka	6	6	5-6	5	6	5-6	0	3	1-2	2	2
Gajdelli szilva	5-6	5-6	6	5-6	6	5-6	0	1-2	1	2-3	1
Gaviota	6	5-6	6	4-5	6-7	6-7	0	3	2	2	2
Giant	6	6	5	5	6	6	0	2-3	2	2	1-2
Giant Super	6-7	5	5-6	5	7	6-7	0	3	2-3	1-2	2
Gilbert	5-6	5-6	5	5	6	6	0	1-2	1-2	2	1
Ginsborne szilva	5-6	6	5-6	5-6	5-6	6	0	2-3	2	2-3	2
Gloria	6-7	6	6	5-6	6	6	0	2-3	2	2	2
Goff	6-7	5-6	6	5	6-7	7	0	3	2-3	2	2
Golden Beauty	6-7	5	6	4	6	6-7	0	3	3	2-3	2-3
Golden Drop	6-7	6	6	5	6	6	0	3-4	2-3	2-3	1

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Golden King	6-7	6	6	4-5	6-7	7	0	3-4	2	2-3	2
Golden Sugar	5-6	6	6	5-6	6	6	0	2-4	2-3	2	2
Gondini	5-6	5-6	5-6	6	6	6	0	2	2	2	3
Gömöri nyakas	5-6	6-7	5-6	5-6	6-7	5-6	0	3	2	2-3	2
Grand Prize	5-6	6-7	5	5	6	6	0	3	2-3	2-3	2
Gras ameliorat	5	6	5-6	5	5-6	5-6	0	3	1-2	2	1-2
Gras Dames	5-6	6	5-6	5-6	6	6	0	3-4	1-2	2	2
Graves Late Victoria	6	5-6	5-6	6	5-6	6	0	3	2	1-2	2
Grosse Mirabelle	5-6	6	5	5-6	5-6	6	0	3	2	1-2	2
Gulieva	6	5-6	5-6	5-6	6	5-6	0	3	1	2	2
H. 59	5	5-6	5	5-6	5-6	5-6	0	3	2	1-2	2
H. 307	5-6	5-6	5-6	5	5	6	0	2-3	2	2	2
H. 331	5-6	6	5-6	5-6	5-6	5-6	0	2-3	2	1-2	2
H. 367	5	5-6	5	5	5-6	5-6	0	1-2	2-3	2	2
H. 480	5-6	6	5-6	5	5-6	5-6	0	2	1	2	2
H. 647	6	5-6	5	5-6	5	5	0	2	1-2	1	2
H. 700	5-6	6	5	5	5-6	5-6	0	2-3	1	2	2
H. 1444	6	5-6	5	5-6	5	5	0	2	2	2	2
Haffner őszi	6	6	5-6	5-6	6	6	0	2	1	3	3
Haganta	5-6	5-6	5-6	5	5-6	5-6	0	2	2	2	2
Hall	6	6-7	5-6	5	5	5-6	0	2	2	2	1
Hanita	5-6	5-6	5	5	5	5-6	0	1-2	1-2	2	1-2
Hanka	5-6	6	5-6	5-6	5	5-6	0	1-2	2	1-2	2
Haroma	6	5-6	5-6	5-6	5	6	0	1-2	1-2	1-2	2
Hartwiss sárga	5	5-6	5-6	5	6	6	0	2-3	1-2	2	1-2
Hegyes szilva	5-6	5-6	5	5	5-6	6	0	3	1	2	2
Henry Courcelles	6	5-6	5	5-6	5-6	6	0-1	3	1-2	2	2
Herman	6	6	5	5	5	5-6	0	4	2	1-2	2
Herrnhausi nagy mirabella	5-6	5-6	5	5-6	5	6	0	1-2	2	1-2	1-2
Hlubeck kajszinszilva	6	5-6	5	6	5-6	6-7	0	3-4	2-3	1-2	2
Hohenheim 1	5-6	5	5-6	5-6	5	6	0	3	1-2	2	2-3
Hohenheim 2	5-6	5-6	5	5-6	5-6	6	0	3	2	2	2
Hohenheim 3	5-6	5-6	5-6	5	5	5-6	0	3	2	2-3	2-3
Hohenheim 4	6	6	5-6	5-6	5-6	6	0	2	1	1-2	1-2
Hohenheim 5	5-6	6	5-6	5-6	5-6	5-6	0	3-4	2	2	2
Hollandi szilva C. 940	5-6	6	6	5-6	6	5-6	0	2-3	1	2	2
Honey Moon	6	5-6	5	5-6	6	6	0	2-3	1	2	2
Hosszú kék damaszkuszi	6	5	5	4-5	5	6	0-1	2	1-2	2-3	1
I. Ferenc József	5-6	5-6	5-6	5	5-6	6	0	3	2	2	2
Idillija	6	6	6	5-6	6	6-7	0-1	3	1	2-3	2
II/b. 21/1	5-6	5-6	5-6	5	5	5-6	0	2	1-2	2	2
Imperial Bulgar	5-6	5-6	5-6	5-6	6	6	0	4	1-2	2	1-2
Imperial Epineuse	5	5-6	5-6	5	6	6	0	3	2	2	1
Italian Prune	6	6	6	5-6	6	6	0	3	2	2-3	2
Izabella	5-6	5	5-6	5-6	5-6	6	0	4	2-3	2-3	1-2
Japanese Gold	6-7	5	6	5	6-7	6-7	0	4	2	2-3	2

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Javított Olasz kék	5-6	6-7	6	5-6	6	6	0	3	2	2	2
Jefferson' Gage	5	6	5	5	5-6	5	0	2	1	2	2
Jelica	5-6	5-6	5	4-5	5	6	0	2-3	1	1	2
Jeruzsámei kék	5	5-6	5-6	4-5	5-6	5-6	0	3	1	1	2
Jodoigne ringló	6	6	5-6	5	5-6	5-6	0	3	2	2	1-2
Jojo	5	5-6	5	5	5-6	5-6	0	1-2	1-2	0	1-2
Jori's Pflaume	6	5-6	5-6	5-6	6	5-6	0	2-3	1-2	1-2	2
Jubileumi kék	6	6	5-6	5	6	6	0	2-3	2	2	2
Júliusi zöld ringló	5-6	6	5-6	5	5-6	6	0	3-4	2	1-2	1-2
July Santa Rosa	6-7	5-6	5	4-5	5	7	0	3	1-2	2	2
Karasu	6-7	6	6	5-6	6	5-6	0-1	2	1	2	1-2
Katalán	5	5	5	5-6	5	6	0	1-2	1	1-2	1-2
Katinka	5-6	5-6	5	5	5-6	6	0	1-2	1	2	1-2
Kazak szilva	6	6	5	5-6	5-6	6	0-1	2	2	2	2
Kecskeméti 101	6	6	5-6	5-6	6	6	0	3	2	1	2
Kék datolya	6	6	6	5-6	5-6	5-6	0	4	2	1-2	2-3
Kék diapré	5-6	6	5	5-6	5-6	6	0	3	2	2	2
Kék tojás	6	6	5-6	5-6	6	6	0	3-4	2	1-2	1-2
Kései mirabella	5	5-6	5-6	5-6	6	6	0	3	1	1-2	2
Kései muskotály	5	5	5	5-6	6	6	0	4	1-2	2	1-2
King of Damson	5-6	5-6	5-6	5	5-6	5-6	0	2	1-2	2-3	2
Kirke szilvája	5-6	5	5-6	5	6	6	0	3	1-2	1	1
Kisinyevszkij rannij	6	6	5-6	5-6	5-6	5-6	0	1-2	1	1	1-2
Kissinger Rose	6-7	6	6	5-6	5-6	6	0	2	2-3	2-3	2
Kometa	5-6	5-6	6	5-6	5-6	6	0-1	3-4	2	2	1
Korai Besztercei	6	5	5	5	5	5-6	0	3	1	3	1-2
Korai Besztercei Cs. 1	6	5	5-6	5	5	5-6	0	2	1	2-3	2
Korai Besztercei Cs. 2	6	5	5-6	5	5	6	0	2	1	2-3	2
Korai kajszinszilva	6	5-6	5	5-6	5-6	6	0	3-4	2-3	2	2
Korai kedvenc	5-6	5-6	5-6	5	5	5-6	0	2	1-2	2	1-2
Korai nemes szilva	6	6	5	5	5-6	5-6	0	3	2	2-3	2
Korai termékeny	5-6	6	6	5-6	6	5-6	0	2	2	2	1
Korai zöld	5	5	5-6	5	5-6	6	0	3	3	2	1
Kökényszilva	5-6	5-6	6	5-6	6	6	0	2	1	1-2	2
Kökényszilva CT. 93	5-6	6	6	5-6	5-6	6	0	1-2	1-2	2-3	2
KönigsbergI	5	5-6	5-6	5	5	5-6	0	3	1-2	2	2
Königspflaume	5-6	5-6	6	5-6	5-6	5-6	0	3	1-2	2-3	2-3
Krina	6-7	5-6	6-7	6	6	6	0	3	2	2	2
KSZ-4	6-7	6	6	6	5-6	6	0-1	3-4	2-3	2-3	2
KSZ-9	6-7	6	6	6	6	6	0-1	3-4	2	2	2
KSZ-31	6-7	6	6	6	5-6	6	0-1	3-4	2-3	2-3	2
Küsztendili	6	5-6	6-7	6	5-6	6	0	2-3	1	3	1-2
Lafayette	6	6	5-6	5-6	5-6	5-6	0	4	2	2	2
Laroda	6-7	5	5-6	4	6-7	7	0	3	2	3	3
Late Orange	6-7	6	6	5-6	6	6	0	4	3	2-3	2-3
Late Santa Rosa	6-7	5-6	5-6	4-5	5	6-7	0	3	2	2	1

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Late Tragedy	5-6	5	5	5-6	5-6	6	0	2-3	1-2	1-2	2
Laubinger	5-6	5-6	6	5-6	6	5-6	0	4	3	2	2
Lawrence ringló	6	6	5-6	5-6	6	5-6	0	3	2-3	2-3	2
Lawson sárga	6	6	6	5-6	5-6	5-6	0	3	2	2	2-3
Laxton's Blue	5	5	5-6	5	6	6	0	3	2	2	2
Laxton,'s Gage	6	6	6	5-6	6	6	0	3	2	2	2
Lemon plum	7	6-7	6	5-6	6-7	6-7	0-1	4	3	1-2	2
Lengyel szilva	5-6	6-7	5-6	5-6	5	6	0	2	1	2-3	2-3
Lepine	6	6	5-6	5	5-6	6	0	2	2	2	1-2
Leppermann Emma	5-6	6	6	5-6	5	6	0	2-3	1	1-2	2
Letricourt	6	5-6	5-6	5	5	6	0	3	2	2	1
Liegel iker	6	6	6	5-6	5-6	6	0	2-3	2	2	2-3
Lincoln	5-6	5-6	5	5-6	5-6	6	0	2	2-3	3	1
Lombard szilva	6-7	6	5-6	5	5	5-6	0	2-3	2	2	2
Lószemű szilva	5-6	5	5-6	4-5	5	6	0	3	1	2	1
Lószemű szilva C. 1502	5-6	5-6	5-6	5	5-6	6	0-1	3	1	1	1
Löhrpflaume	5-6	5-6	5	5-6	5	6	0	2-3	2	1-2	1-2
Lőweni szép	5	6-7	5	5-6	5-6	6	0	3	2	1-2	2
Lucas királyszilva	6	6	6	6	5	6	0	1-2	2-3	1-2	3
Lützersacher Frühzwetsche	5-6	5-6	5-6	5	5-6	6	0	2-3	2	2	2
MacLaughlin	5	5-6	5-6	5	5-6	6-7	0	2	2	3	2
Magna Glauca	5-6	6	5-6	5	5	6	0	3-4	1-2	1-2	1-2
Magyar datolyaszilva	5-6	5-6	5-6	5	5	6	0	3-4	3	2	2
Mainzi korai	5	5	6	5	5-6	6	0	3	2-3	2	2
Máramarosi nyakas	5	6	5	5-6	6	5-6	0	3-4	2	1-2	2
Marianna W. 39	5-6	5	6	5	6	7	0	1-2	1-2	2	2
Mariposa	6-7	5-6	6	4-5	6-7	7	0	2	2	2	1-2
Markuja	5-6	5	5	4	5	6-7	0-1	4	1	2	2
Mas császárszilva	5	5-6	5-6	5	5-6	6	0	2-3	2-3	2	3
Mascina de Montepulciano	6	6	6	5-6	6	6-7	0	2-3	2	2-3	2
Maugeroni szilva	6	5-6	6	6	6	6-7	0	4	1-2	2	2
Meroldt ringló	5-6	6	5-6	5	5-6	5-6	0	3	2	2	2
Merryweather	7	6	5-6	5-6	5-6	6	0	1	2-3	2-3	3
Methley	7	5-6	5	5	5	5	0	2	2	1-2	2
Metzi mirabella	5-6	5	5	5	5	6	0	2-3	2	1	1-2
Milánói császár	6-7	6	5-6	5	5-6	5-6	0	4	2-3	2-3	2
Mildora	6	6	6	5	6	5	0	3-4	2	2	2
Mirabellák királynője	5-6	5	5-6	5	6	6	0	3	1-2	1-2	1-2
Mirabelle de Nancy	5-6	4-5	5	4-5	5	6	0	3	1	1	1-2
Mohawk	6	6	6	5	5-6	6	0	2-3	2	2	2
Moldavszkaja	5	5	5-6	5	5	6	0-1	2-3	1-2	2	2
Monarch	5-6	6	6	5-6	5-6	6	0	3	2	2	2
Monsieur Hâtive	6	5	6	5	5-6	6	0	3	2	2	3
Montfort	5-6	4-5	5-6	4-5	5	7	0	3-4	2	1	2-3
Nagrada	5-6	5-6	5-6	5	6	6	0	3	1-2	2	1-2
Nagy cukor	5	6	6	5	5	6	0	3	2	1-2	2

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Nagybányai Besztercei	5-6	5-6	5-6	5	6	6	0	2	1-2	2-3	2
Nagyherceg	6	6	6	5	5-6	6	0	3	1-2	1	2
Nancy-i ringló	6	6	5-6	5	6	6	0	4	2	2	1
Nemtudom szilva	5	6	5-6	5	5-6	6	0	1	1-2	1-2	1-2
Normann perdrigon	6	5-6	6	5	5-6	5-6	0	2-3	2-4	2-3	2
Nubiana	7	6	6	6	6	6	0	3	2	2	2
Nyári aszaló	5	5-6	5	4-5	5	5-6	0	2	1	2-3	1
Obilnaja	7	5-6	5	5	6-7	5	0	3	3	1-2	1-2
October Sun	6-7	6	6	5	6-7	6-7	0	4	2	2	2
Oka	6-7	5	6	4	6-7	7	0	2-3	2	1-2	2
Októberi violaszínű	5-6	6	6	5	6	6	0	3-4	2-3	2	2
Oktrjabszkaja	6	6	5-6	6	6	6	0	3-4	2	2-3	2-3
Olasz kék	5	6-7	6	5-6	6	5-6	0	3-4	2	3	2-3
Olasz zöld	5-6	5-6	5-6	5-6	6	5-6	0	3-4	2	2-3	2-3
Onderka damaszcena	5	5-6	5-6	5-6	5-6	6	0	2	1-2	2	2
Oneida	5	6-7	6	5	6	6	0	2-3	2	2	2
Ontario	5-6	5	5-6	4-5	5	5-6	0	1-2	1	1-2	1-2
Opal	6	5	5-6	5	5-6	5-6	0	2	1-2	2	2
Óriás	6	5-6	5	5	5-6	5	0	2	2-3	2	1-2
Orsó szilva	5	5-6	5	4-5	5-6	5-6	0	1-2	2	1	2
Ozark Premier	6-7	5	5	4	6-7	6-7	0	2	3	2	2-3
Öreglaki korai	5	5-6	5	5	6	6	0-1	1-2	1	1-2	1-2
Őszi aszaló	5-6	5-6	5-6	5	5-6	6	0	2	1	2-3	2
Őszi ringló	6	5-6	5-6	5	6	6	0	2-3	2-3	2	2
Pacific	5-6	5	5	5	5-6	6	0	4	2	1-2	1-2
Paczelt szilvája	6	5-6	5	5	6	6-7	0	3	2	2	2
Panyolai	5	5-6	5-6	5	5-6	6	0	1	1-2	2	1
Pauline Schlechter	5-6	5-6	5	5	5-6	6	0	4	3-4	2-3	2
Penyigei	5	5-6	5-6	5	6	6	0	1	1-2	2	1
Perfection	6	6	5	5	6	6-7	0	3	2	1-2	2
Pescarus	5-6	5-6	5	5	5-6	6	0	3	1	2	1
Piros cseresznyeszilva	5	5-6	5-6	5	5-6	6	0	3	1	1-2	1
Piros tojás	6	6	6	5-6	5-6	6	0	3	2	2	2-3
Piros Washington	5-6	6	5-6	5-6	6	6-7	0	3	1-2	2	2
Plovdivna deszertna	5	5	6	5-6	5	5	0	2-3	1	2-3	1
Plovdivna szinja	5-6	5	6	5	5	5-6	0	2-3	1	3	1
Pond's seedlling	5-6	5-6	5-6	5-6	5	6	0	3	1-2	1-2	1-2
Pontbrianti szilva	7	6	6	5-6	5-6	6-7	0	3-4	2-3	1-2	2
Pożegača	5-6	6	5-6	5-6	5	6	0	2	1	2	1
Pozna Plava	5	6	5-6	5	5-6	6	0	2	1	2	1
Precoce di Giugno	6-7	6	6	5-6	6	6	0	3	2	2	2
Presenta	6	5	5-6	5-6	6	5-6	0	1	1-2	1-2	2-3
President	6	5-6	5	5	5-6	5	0	1-2	1	2	2-3
Prettini	6	5-6	5	6	5	6	0	2	2	2	1-2
Primate	6-7	6	5-6	5-6	5-6	5-6	0	2-3	2	2-3	2
Prince császár	5-6	5-6	5-6	5-6	6	6	0	3-4	2	2	1-2

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Prince piros ringló	5-6	6	6	5-6	6	6-7	0	3	1-2	2	1
Procureur	6	6	6	5-6	6	6	0	3	2	2	2
Prune d'Ente 686	6	6	5	4-5	6	5	0	3	1-2	2	2
Prune d'Ente 707	6	5-6	5	5	6	5	0	3	1-2	2	1-2
Prune Large Black	5-6	5	5-6	5-6	6	5-6	0	3	3	2	2
Purpurovaja	6-7	4-5	5-6	4	6-7	7	0-1	2	2	2-3	1-2
Queston	5-6	6	5-6	5	6	6	0	2	1-2	2	2
Rademaekers szilva	6	5-6	6	5-6	6	6	0	3-4	2	2-3	2
Reine-Claude de Bavay	6	5-6	5-6	5	6	6	0	2-3	1-2	2	2
Reine-Claude d'Oullins	6-7	5	5-6	5-6	6	6-7	0	3	2	2	2
Reizensteini sárga	5-6	5-6	5-6	5	5-6	5-6	0	3	2-3	2-3	2-3
Révfülöpi	6	5-6	5	5	6	6-7	0	3	2	2	2
Richards Early Italian	5-6	5-6	6	6	5-6	6	0	3	2	2-3	2
Rigny admirális	5	5-6	5-6	5	6	5-6	0	3	2-3	2-3	2-3
Rizkova	5-6	6	5-6	5	5-6	5-6	0	1-2	1	2-3	1
Roter Spilling	5-6	5-6	5	5-6	6	6	0	2	1	1-2	1-2
Royer kajszilszilva	6	5-6	5-6	5	5-6	5-6	0	3	2-3	1	2
Rózsaszilva C. 1505	6-7	6	6	5-6	5-6	6	0	2	2	2	3
Rubysweet	6-7	6	6	6	6	6	0	3	2	2	2
Ruth Gerstetter	6	5-6	5-6	5	6	6	0	3	2	1	2-3
Saint-Étienne-i szilva	5-6	5-6	5	5-6	5	5-6	0	3	1	2	2-3
Santa Rosa	6-7	5	5	4	5	7	0-1	2-3	1-2	1	1-2
Sárga kajszinszilva	6	6	6	5-6	5-6	6	0	3	2-3	1-2	2
Sárga mirabella	6	5-6	5-6	5-6	6	6	0	1	1	1-2	1-2
Sár ringló	5-6	5-6	6	6	6-7	6	0	3-4	2	2	1
Sárga szilva C. 1501	6	5-6	5-6	6	6	6-7	0	3	2	2	2
Sárga tojás	6	5-6	5-6	5-6	5-6	6	0	3	2-3	2	1-2
Sárga úri	5-6	5-6	5-6	5	5	6	0	2	1-2	2	1-2
Sasbachi korai	5-6	5-6	5-6	5-6	5	5-6	0	2-3	2	2	1-2
Satsuma	6-7	6	6	6	5-6	6	0	2-3	3	2-3	2
Schallers Lahrer Frühzwetsche	5	5-6	5	5-6	5-6	6	0	2-3	2-3	2	2
Schwäbische Frühzwetsche	5-6	6	5-6	5-6	5-6	5-6	0	2	2-3	2	2
Sejenov	6	6	5-6	5-6	5-6	5-6	0	2	2	2	2
Sermina	6	5	5	5	5	6	0	3	2	1	1
Sharp császárszilva	5-6	5-6	5-6	5-6	5	6	0	1-2	2-3	2-3	2-3
Shiro	7	6	6	5-6	6	6-7	0	1-2	1-2	1-2	2
Silvia	6-7	5	5	5	5-6	6	0	3	2-3	2	2-3
Simka	7	5	5	4-5	5-6	5-6	0	3-4	2	1	1
Slapanicka	5-6	6	5-6	5-6	5-6	6	0	2	1	2-3	1
Smith úri	6	5-6	5-6	6	5-6	6	0	2-3	2-3	2	2
Sötétkék tojás	5-6	5-6	5-6	5-6	6	6	0	3	2	2	1
Soriso de primavera	6-7	6	6	6	6	6-7	0	2	2	1-2	2
Späth Anna	5-6	4	5	4-5	5-6	5-6	0	3	2	2	2-3
Späth legkorábbi	6	5	5-6	5	5-6	5-6	0	2	2	1-2	1-2
Späth Vilma	6	5-6	5-6	5	5	6	0	2	2	1	2-3
Spendlor	5-6	5-6	5-6	5	5-6	6	0	2-3	2-3	2	2-3

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
St. Julien A	5-5	5-6	5	5-6	5	6	0	2	1	1-2	2
St. Julien B	5-6	5	5-6	5	5-6	6	0	1-2	1-2	1	2
St. Julien C	5	5-6	5	5-6	5	5-6	0	2	1-2	2	2
Stanley	6	5	5	5	6	6	0	2	1-2	1-2	1-2
Stanley NDK	6	5	5-6	5	6	6	0	2-3	1	1	1
Stanley Ny. 140	6	5	5-6	5	5-6	5-6	0	2	1	1-2	1
Stanley Román	6	5	5	5	5-6	5-6	0	2-3	1	1-2	1-2
Stanley Yugoslav	6	5	5	5	5-6	5-6	0	2	1	1	1
Starking Delicious	7	6	5-6	5-6	6	6-7	0	4	2	2	2
Sugar Prune	6	5-6	5-6	5	6	5	0	3	2	2	1-2
Sugar Top	6	6	5	5-6	5-6	5-6	0	2	2	2	2
Svehova	6	5-6	5-6	5	5-6	6	0	2	1-2	2-3	2
Sweet Autumn	6-7	5	5-6	5	7	6-7	0	3	2-3	2-3	2
Szakarka	5-6	5-6	5-6	5	5-6	5-6	0	2-3	2	2	1-2
Szarvasi	5-6	5	5-6	4-5	5-6	6	0	3	2	2-3	2
Szent Katalin	5-6	5	5-6	5	5-6	6	0	3	2	2-3	2
Szeptemberi fűszeres mirabella	5-6	5-6	5	5-6	5	6	0	1-2	1-2	2	1-2
Szigeti zöld	6	6	5-6	5-6	5-6	6	0	4	2	2	1-2
Szívalakú cseresznyeszilva	5	5	5	5-6	5	5-6	0	4	2	1	2
Szopornyica	6	6	6	5-6	5-6	5-6	0	3-4	2-3	2-3	2-3
Sztrumszka	5-6	5-6	5	5-6	5	6	0-1	2-3	2	2	2
Szűzpiros szilva	5-6	5-6	5-6	5	5	5-6	0	4	2	2	2
Tardicotes	6-7	6	5-6	5	5-6	6	0	3	1-2	2	2-3
Tarka perdrigon	5-6	4-5	5	4-5	5-6	6	0	2	2	2	2
Tarka szilva	5-6	5	5-6	5	5-6	5-6	0-1	2	1-2	1	2-3
Tegera	5-6	5	5-6	5-6	5-6	6	0	2	2-3	2-3	2
Timocanka	6	5-6	5-6	5	5-6	5-5	0	2	1	1-2	1-2
Toka	7	5	5-6	5	6	5-6	0	3	2	2	3
Top	5-6	5-6	5-6	5-6	5-6	5-6	0	2	1-2	2	2
Top 2000	5-6	5-6	5-6	5	5-6	5-6	0	2	1	1-2	2
Top Gigant Plus	6-7	6	5-6	5	6	6	0	2	2	1	2
Top King	5-6	5-6	5	5-6	5-6	5-6	0	1-2	1	1-2	1-2
Topend Plus	6	6	5-6	5-6	5-6	6	0	1-2	1	1-2	1-2
Topfirst	5	5-6	6	5	5-6	5-6	0	2	1	2	2
Topfive	5-6	5	5	5-6	5-6	5-6	0	2	1-2	1-2	2
Tophit	5-6	5-6	5-6	5	5-6	6	0	2	1-2	1-2	2
Tophit Plus	6	6	5-6	5-6	5-6	6	0	2	2	2	1-2
Topper	5-6	5	5	5-6	5-6	5-6	0	2	1-2	2	1-2
Topstar Plus	6	6	5	5	6	6	0	2	1-2	2	2
Toptaste	6	6	5-6	5-6	5-6	6	0	2	1-2	1-2	1
Tragédia	5-6	5-6	5-6	5	5-6	6	0	2	1-2	2	2
Trojanszka szinja	5-6	5-6	5-6	5	5	5-6	0	2	1-2	2-3	1-2
Tuleu dulce	5-6	5	5	5	5-6	6	0	3	2	2	3
Tuleu gras	5-6	5-6	5	4	6	6	0-1	1-2	1-2	1-2	2
Tuleu timpuriu	6	5-6	5-6	5	5-6	6-7	0	3-4	2	2	3
Typ. 205	6	6	6	5-6	5-6	5-6	0	3	2	2	2

Continuation of ***Table 1***

Species, cultivar	TB	WB	RB	NB	LB	KB	SB	OP	FR	SS	DR
Uhinksz ringló	5-6	5-6	5-6	5-6	5-6	5-6	0	2	2	2	2
Uhlhorns Konservpflaume	5	5	5-6	5-6	5	6	0	3	3	2-3	2-3
Utility	6-7	5-6	5-6	5	5-6	6	0	3	3	2-3	3
Üzbég Vengerka	6	6	6	5-6	5-6	6	0-1	3	1-2	2	2
Valerija	5-6	5-6	5-6	5-6	5	6	0	2-3	2	2	2
Valjevka	6	6	5-6	5	5-6	6	0	2	2	2	2
Valor	5-6	5-6	5	5-6	5	5-6	0	2	1-2	2	2
Van Mons piros szilvája	5	5	5-6	5-6	5	6	0	4	3-4	3	3
Vankova	6	6	5	5-6	5	6-7	0-1	3	2-3	2	1-2
Velkoplodna	5-6	6	5-6	5-6	5-6	6	0	3-4	2	2	2
Vengerka Kait	5-6	5-6	5	5-6	5-6	5-6	0-1	2-3	2	2	1-2
Vérbélű szilva	5-6	5	5-6	5	5-6	5-6	0	3	1	3	2
Verity	5-6	5-6	5-6	5-6	5	6	0	3	1-2	2	2-3
Veres szilva (Tiszántúl)	5	5	5	5	5-6	5-6	0-1	2	1-2	2	1-2
Victoria	5	4-5	5-6	5	5	5-6	0	2	1-2	2-3	2-3
Vineta Romanesti	5	5-6	6	5-6	5-6	6	0-1	2-3	2	1-2	2-3
Vinke korai	5	5	5	6	5-6	5-6	0	2	2	2	1
Violaszínű császárnő	5-6	5-6	5-6	6	5-6	6	0	3	2	2-3	2
Violaszínű diapré	5-6	6	6	5-6	5	5-6	0-1	3	2	2	1-2
Violaszínű királyszilva	6	6	6	6	5-6	6	0	3	2	2-3	2
Violaszínű korai perdrigon	5-6	5-6	5-6	5-6	6	6	0	3	2-3	2	2
Violaszínű ringló	6	5-6	5-6	5-6	6	6	0	3	2	2-3	2-3
VIR Vengerka	5	5	5	5-6	5-6	5-6	0	2	2	2	1-2
Voyageur	6-7	6	6	6	5-6	5-6	0	3-4	3	3	2-3
Vörös szilva (Duna-Tisza köze)	5-6	4-5	5	4-5	5-6	6	0	2	1	1-2	1
Walesi herceg	6	5	5-6	5	5	6	0	1	1	2	2-3
Walter szilvája	5-6	5-6	5-6	5	5-6	5-6	0	3	3	2-3	3
Wangenheim	5-6	5	5	4-5	5-6	5-6	0	1-2	2	1	21
Wanka	6-7	6	5-6	5	6	5	0	3-4	2-3	2-3	2-3
Waschmann Berta	6	5-6	5	5-6	5-6	5-6	0	3	2-3	2	2-3
Washington	6	6	5-6	6	5-6	5-6	0	2-3	1-2	2	2
Waught	7	6	6	6	5	6	0	4	3-4	2-3	2
Wiener Frühzwetsche	6	5	5-6	5	5-6	6	0	3	2-3	1-2	2
Willamate	5	5	5-6	5	5-6	5-6	0	3	2	2	2
Wolf	6-7	6	6	5-6	5-6	6	0	4	3	2-3	3
Yakima	5-6	5	5	5	6	6	0-1	3-4	1-2	1	1-2
Zerterfleth	6	5	5-6	5	6	6	0	2-3	2-3	2	2-3
Zimmer's Frühzwetsche	5-6	5-6	5-6	5	5-6	6	0	3	2	2	2
Zlatka	6-7	5-6	5	5-6	6	5-6	0	2	1-2	1-2	1-2
Zöld datolya	5-6	5	5-6	5	6	5-6	0	3	2-3	2	2-3
Zöld ringló	6	5	5	5	6	6	0	3-4	2	1-2	1-2
Zwetschenbastard No. 2	5-6	5-6	5	5	5-6	6	0	2-3	2	2	2
Zsolta afazka	6	5	5-6	5	6	6	0-1	1-2	1-2	1-2	1-2
Zsnyivka	5-6	5-6	5	5	5-6	6	0	2	2	2	2

Table 2. Relative ecological indicator values of plum cultivars

Relative ecological indicators	Interval	Mean	CV, %
Temperature figures(TB)	5→7	5.79±0.49	8.5
Moisture figures(WB)	4→7	5.56±0.43	7.8
Reaction figures (RB)	4→7	5.48±0.38	7.0
Nitrogen figures (NB)	4→6	5.17±0.42	8.1
Light figures (LB)	4→7	5.57±0.43	7.7
Continentality values (KB)	4→7	5.83±0.43	7.4
Salt figures (SB)	0→1	0.04±0.13	347.5
Open pollination (OP)	1→4	2.62±0.74	28.0
Frost resistance (FR)	1→3	1.84±0.55	29.0
Sharka sensitivity (SS)	0→3	1.96±0.47	24.0
Disease resistance (DR)	1→3	1.88±0.58	27.6

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